

WHAT IS CLAIMED IS:

1. A method for generating a two-dimensional electronically modeled aircraft engine harnesses from a three-dimensional harness definition that includes a plurality of connector fittings coupled together with a plurality of branches, said method comprising the steps of:

- 5 defining each harness connector fitting;
- determining design parameters; and
- generating a two-dimensional stick form model.

2. A method in accordance with Claim 1 further comprising the step of displaying the design parameters in a tabular output.

10 3. A method in accordance with Claim 2 wherein said step of determining design parameters further comprises the step of determining at least one of a branch angle, a base angle, and a true angle for the harness.

15 4. A method in accordance with Claim 2 wherein said step of determining design parameters further comprises the step of determining at least one of a wire length, a fitting keyway, and a master keyway for the harness.

 5. A method in accordance with Claim 2 wherein said step of determining design parameters further comprises the steps of:

- determining a length between harness branches; and
- determining locations of diametrical changes of the harness.

20 6. A modeling system for producing an electronic model of an aircraft engine harness, said system configured to generate a two-dimensional electronic drawing from a three-dimensional harness definition that includes a plurality of connector fittings coupled together with a plurality of branches.

7. A modeling system in accordance with Claim 6 wherein to generate the two-dimensional electronic model, said system further configured to determine at least one of a branch angle, a wire length, and a base angle of the harness.

8. A modeling system in accordance with Claim 6 wherein to generate the two-dimensional electronic model, said system further configured to determine at least one of a harness true angle, a fitting keyway, and a master keyway of the harness.

9. A modeling system in accordance with Claim 6 wherein said system further configured to determine a length between adjacent harness branches.

10. A modeling system in accordance with Claim 6 wherein said system further configured to determine diametrical changes of the harness branches.

11. A modeling system in accordance with Claim 7 wherein said system further configured to define each connector fitting of the harness.

12. A system for generating a two-dimensional electronic model of an aircraft engine harness from a three-dimensional aircraft engine harness definition that includes a plurality of connector fittings coupled together with a plurality of branches, said system comprising a processor programmed to determine harness design parameters from the three-dimensional aircraft engine harness definition.

13. A system in accordance with Claim 12 wherein said processor further programmed to determine parameters including at least one of a branch angle, a base angle, and a true angle.

14. A system in accordance with Claim 12 wherein said processor further programmed to determine parameters including at least one of a wire length, a fitting keyway, and a master keyway.

15. A system in accordance with Claim 12 wherein said processor further programmed to display the harness design parameters in a tabular format.

16. A system in accordance with Claim 12 wherein said processor further programmed to define each harness connector fitting.

17. A system in accordance with Claim 12 wherein said processor further programmed to determine a length between harness branches.

5 18. A modeling system in accordance with Claim 12 wherein said processor further programmed to determine diametrical changes of the harness branches.